

1    **Supplementary Information**

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3    **High-throughput sequencing reveals differential regulation of**  
4    **miRNAs in fenoxaprop-P-ethyl-resistant *Beckmannia syzigachne***

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## 1   Supplementary Contents:

2   Table S1 Summary of conserved miRNAs

miRNA Family	Name	miRNA Sequence (5' to 3')	Length	Homology by specie
miR156	bsy-miR156a-5p	ugacagaagagagagagcac	20	<i>A. thaliana</i>
miR6475	bsy-miR6475	ucuugagagaccaaaucugc	21	<i>P. trichocarpa</i>
miR396	bsy-miR396e-5p	uccacaggcuuuucuugaacgg	21	<i>O. sativa</i>
miR165	bsy-miR165a-3p	ucggaccaggccuucauucccc	21	<i>A. thaliana</i>
miR2111	bsy-miR2111a-5p	aaaucugccaguuuggcacc	21	<i>A. thaliana</i>
miR160	bsy-miR160a-5p	ugccuggcucccugcaugcca	21	<i>A. thaliana</i>
miR6032	bsy-miR6032-3p	acugcuggcgaacagaaaaacgug	24	<i>B. rapa</i>
miR5022	bsy-miR5022	uucauggggauaguagcuc	18	<i>A. thaliana</i>
miR164	bsy-miR164a	uggagaagcaggucacgugu	20	<i>A. thaliana</i>
miR1130	bsy-miR1130b-3p	ucuuauaucaggggacagagg	21	<i>T. aestivum</i>
miR5281	bsy-miR5281b	ucuuauauuguggaacggagg	21	<i>B. distachyon</i>
miR5272	bsy-miR5272a	uaauugaugcagauuuagua	20	<i>M. truncatula</i>
miR5080	bsy-miR5080	aaaaggauguaucuagacgu	20	<i>O. sativa</i>
miR408	bsy-miR408-3p	ugcacugccucuucccuga	19	<i>A. thaliana</i>
miR5174	bsy-miR5174a	cuccguuccauauauaagcc	21	<i>B. distachyon</i>
miR907	bsy-miR907	gcuucugcagguggcuuuuc	20	<i>C. reinhardtii</i>
miR5181	bsy-miR5181d	acuuauuauggauuggaggua	21	<i>B. distachyon</i>
miR7714	bsy-miR7714-3p	uuaauauggaucggaggaggu	21	<i>B. distachyon</i>
miR167	bsy-miR167c	ucagaugacugcucuuuc	18	<i>G. raimondii</i>
miR827	bsy-miR827-5p	auuuguuggagaugguguuga	21	<i>B. distachyon</i>
miR2907	bsy-miR2907a	cgcagccgucgcuguggagcgg	24	<i>O. sativa</i>
miR536	bsy-miR536a	uucgugccggcaaugaacgcgc	23	<i>P. patens</i>
miR7776	bsy-miR7776-5p.1	uuugccucccucucuaucua	21	<i>B. distachyon</i>
miR5387	bsy-miR5387b	cguggcuuccucuggguacu	19	<i>S. bicolor</i>
miR6225	bsy-miR6225-3p	aaaacgaacuggugcaggua	20	<i>S. bicolor</i>
miR7778	bsy-miR7778-3p	uugcgccggugucuccugcaac	23	<i>B. distachyon</i>
miR5050	bsy-miR5050	gugaacgaggaaaggcau	18	<i>T. aestivum</i>
miR5201	bsy-miR5201-3p	cgggcgaggccggcggcggcgc	21	<i>B. distachyon</i>
miR820	bsy-miR820a	ucggccucgcgcucgcgcuc	20	<i>O. sativa</i>
miR5181	bsy-miR5181-3p	cacuuauuauggaucagaggg	21	<i>A. tauschii</i>
miR1509	bsy-miR1509a-3p	uccggauuuuuuuucagauu	20	<i>M. truncatula</i>
miR159	bsy-miR159b-3p.3	uuugcaugaggaggacca	18	<i>B. distachyon</i>
miR169	bsy-miR169a-5p	aagccaaguugguucuggagu	21	<i>A. thaliana</i>
miR8634	bsy-miR8634	gugguauguggaagaugc	18	<i>G. raimondii</i>
miR1444	bsy-miR1444d	agaacgaaaaaagaaguacauccag	25	<i>P. trichocarpa</i>
miR5181	bsy-miR5181-3p	cacuuauuauggaucagagguagu	24	<i>A. tauschii</i>
miR1222	bsy-miR1222a	uugaaggaaucacagagcgac	21	<i>P. patens</i>
miR5174	bsy-miR5174c-5p	uccuccguuccaaauuaauug	22	<i>B. distachyon</i>
miR2927	bsy-miR2927	cgucgucggcgcagccgg	18	<i>O. sativa</i>
miR6207	bsy-miR6207	aggacgacgcuacuuccugcugc	23	<i>H. vulgare</i>

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2 Table S2 Summary of novel miRNAs

miRNA location	Members	Sequence (5' to 3')
comp134939_c0_10133	novel-bsy-miR-1	ucugaagaugaauguauaucug
comp25586_c0_70228	novel-bsy-miR-2	aaaaaaagauugagccgagu
comp19400_c0_33811	novel-bsy-miR-3	agugaguguaaaagcugacguggc
comp149885_c0_16793	novel-bsy-miR-4	agaauuauggaauggaggag
comp3470_c1_111252	novel-bsy-miR-5	ccuccgauccaaauaaagugu
comp24509_c0_62522	novel-bsy-miR-6	ucgcuggagcucgcgugcauccuu
comp73966_c0_129319	novel-bsy-miR-7	ugccgcugagaccggcgaaau
comp21282_c0_44432	novel-bsy-miR-8	ccuccgaucggaaaaggugu
comp24294_c0_61116	novel-bsy-miR-9	ccucgcggauugcuggcgcg
comp22287_c0_49543	novel-bsy-miR-10	uagucgcugugggccaagccg
comp22287_c0_49542	novel-bsy-miR-11	uagucgcugugggccaagccg
comp149885_c0_16798	novel-bsy-miR-12	agaauuauggaacguagguag
comp417552_c0_117651	novel-bsy-miR-13	gugcgcgcggcgccgucgauc
comp20703_c0_42110	novel-bsy-miR-14	cuccgauuggaaaaaguuguc
comp9660_c0_144081	novel-bsy-miR-15	augguguauuacacaaacgug
comp230_c0_53881	novel-bsy-miR-16	acacuuauuauggaucggagg
comp46386_c0_120618	novel-bsy-miR-17	uuauccugacuuugguucacu
comp19417_c0_33904	novel-bsy-miR-18	ccucgcggcacggccgc
comp100249_c0_179	novel-bsy-miR-19	cuccgauccaaauaaaguguc
comp28138_c0_93266	novel-bsy-miR-20	acgugcggucccgugggugg
comp30236_c0_102344	novel-bsy-miR-21	uggacuuucgcgcacgcuuucggcgg
comp17455_c0_28699	novel-bsy-miR-22	uuagcgaauuaauuauggga
comp25440_c0_68949	novel-bsy-miR-23	auagcauuugaggcacuuugg
comp31201_c0_104898	novel-bsy-miR-24	cgccaugggagggcuccaagaucca
comp28490_c0_94873	novel-bsy-miR-25	cacagccaccgcugccgcgcg
comp15354_c0_19166	novel-bsy-miR-26	ucgccuacuacugggagacgca
comp10274_c0_1790	novel-bsy-miR-27	uuuauaagacguuuuggcaag
comp26717_c0_80207	novel-bsy-miR-28	ucgcggccgcaccgagc
comp59396_c0_124670	novel-bsy-miR-29	ucgucuccgcccgcgcuucc
comp14214_c0_12079	novel-bsy-miR-30	aaaggcuuauauuguggaaca
comp15098_c0_17682	novel-bsy-miR-31	aucggagacugaugugcc
comp24365_c0_61690	novel-bsy-miR-32	uaucccgugucaggcgugguggcagg
comp41330_c0_117446	novel-bsy-miR-33	augggcguaucauccuguauuaca
comp45964_c0_120432	novel-bsy-miR-34	ugcugggcugauccggggcc
comp27914_c0_91950	novel-bsy-miR-35	gccgcgcggcgggugcagggu
comp31072_c0_104552	novel-bsy-miR-36	cgcggacacggccaugguggcg

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